

SCHWINN, Debra A.  
Appl. No. 10/715,844  
October 2, 2006

### REMARKS/ARGUMENTS

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

Claims 1-7 have been cancelled without prejudice and claims 25-35 have been added in lieu thereof. The new claims find support throughout the application, with particular attention being directed to the Example, Table 6 and Figure 2, as well as the claims as originally filed. More specifically, transmembrane helices and intracellular loops of  $\alpha_{12}$ AR (recited in claim 25 and claims depending therefrom) are shown in Figure 2. The locations of the specific amino acid residues recited in claims 28 and 30 are given in Table 6. Support for claims 31 and 32 is found in Table 6 (which identifies residue 347 and residues C-terminal thereto as being "C-terminus"). Furthermore, Price et al, cited at page 14, line 21, and incorporated by reference at page 26, describes studies relating to the carboxyl terminus of  $\alpha_{12}$ AR. That the claims have been revised should not be taken as an indication that Applicants agree with any position taken by the Examiner. Rather the revisions have been made merely to advance prosecution and Applicants reserve the right to pursue any deleted subject matter in a continuation application.

As regards the Examiner's requirement for restriction, reconsideration and withdrawal of the requirement, at least as between the subject matter of Groups I and II, is again requested. Given the nature of the methods claimed, it is believed that a complete search of the subject matter of Group I would necessarily encompass the subject matter of Group II. Applicants reserve the right to file a Petition should the Examiner not be inclined to rejoin at least Groups I and II.

Claims 1-7 stand rejected under 35 USC 112, first paragraph, as allegedly lacking written description. Withdrawal of the rejection is submitted to be in order for the reasons that follow.

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The claims as now presented encompass point mutations that result in an amino acid substitution in a specified region of  $\alpha_{1A}$ AR. The scope of the claims as presented is entirely consistent with the written description provided, including the specific examples of such mutations. Accordingly, reconsideration is requested.

Claims 1-7 stand rejected under 35 USC 112, first paragraph, as being non-enabled. Withdrawal of the rejection is submitted to be in order for the reasons that follow

In rejecting the claims as non-enabled, the Examiner contends that the art teaches a lack of association between mutations of  $\alpha_{1A}$ AR and diseases. However, none of the references cited by the Examiner relate to point mutations that result in amino acid changes in the regions of the receptor recited in the claims as now presented. The references upon which the Examiner relies relate generally to non-coding sequences or sequences encoding the C-terminus (e.g., Bolonna et al, and Sofowera et al). As regards the C-terminus, attention is directed to Price et al, J. Biol. Chem. 277:9570 (2002) cited in the application at page 14. This reference teaches that acute agonist-mediated desensitization of human  $\alpha_{1A}$ -AR is primarily independent of the carboxy terminus.

In addition to the above, the Examiner's attention is directed to the fact that meaningful conclusions as to associations between mutations and diseases must be based on samples of such size as to enable appropriate statistical analysis, which is not the case in all of the references cited by the Examiner.

In view of the foregoing, the Examiner is urged to reconsider and withdraw the rejection.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

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Respectfully submitted,

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